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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,716	05/24/2004	Chee-Shuen Lee	13225-US-PA	3715
31561	7590	03/17/2006	EXAMINER	
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE 7 FLOOR-1, NO. 100 ROOSEVELT ROAD, SECTION 2 TAIPEI, 100 TAIWAN			VO, ANH T N	
			ART UNIT	PAPER NUMBER
			2861	

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/709,716

Applicant(s)

LEE ET AL.

Examiner

Anh T.N. Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-34 and 37 is/are rejected.
- 7) ☒ Claim(s) 35 and 36 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/24/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The references cited on PTO 1449 have been considered.

CLAIM REJECTIONS

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 7-9, 13-14, 17, 19-24, 28-29, 34 are rejected under 35 USC 102 (e) as being anticipated Cho et al. (US Pat. 6,814,434).

Cho et al. disclose in Figure 2 an ink cartridge comprising:

- a housing (20) having a substantially sealed space;
- an ink pipe (40) connected to said housing (20), said ink pipe being fluidly linked to said sealed space;

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- an ink storage unit (25) comprising a porous material being disposed inside said sealed space and substantially airtightly contacting with an inner wall of a bottom of said housing (20), said ink storage unit (25) being above said ink pipe (40) and having a gap (an unmarked gap that is between two elements 25 and 50) with a top of said ink pipe (40) (column 4, lines 55-60);
- a portion of said ink storage unit (25) adjacent to said ink pipe (40) having a capillarity larger than other portion of said ink storage unit (column 4, lines 40-44);
- a filter (50) disposed on said ink pipe (40);
- wherein said ink storage unit (25) is adhered to the inner wall of the bottom of said housing (20);
- a sheet (60) between said ink storage unit (25) and the inner wall of the bottom of said housing (20), wherein said ink storage unit (25) substantially airtightly contacts with said sheet (60) and said sheet substantially airtightly contacts with the inner wall of the bottom of said housing (20) (column 4, lines 36-38);
- wherein said sheet (60) is a plastic sheet;
- wherein said ink storage unit (25) is adhered to said sheet (60) and said sheet (60) is adhered to the inner wall of the bottom of said housing (25);
- wherein said ink pipe (40) is extended into said sealed space; and
- wherein said porous material (25) includes a sponge material.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior arts are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 4-6, 10-12, 14-16, 18, 25-27, 31-33, and 37 are rejected under 35 USC 103 (a) as being unpatentable over Cho et al. (US Pat. 6,814,434) in view of Haruta et al. (US Pat. 5,182,579).

Cho et al. disclose the basic features of the claimed invention were stated above but do not disclose said ink storage unit that is heat-pressed before said ink storage unit is disposed inside said sealed space; a first adhesive material between said ink storage unit and said sheet for adhering said ink storage unit onto said sheet, and a second adhesive material between said sheet and the inner wall of the bottom of said housing for adhering said sheet onto the inner wall of the bottom of said housing and/or said ink storage unit is welded to said sheet and said sheet is welded to the inner wall of the bottom of said housing and/or said ink storage unit is welded to said sheet by heat sealing or ultrasound welding, and said sheet is welded to the inner wall of the bottom of said housing by heat sealing or ultrasound welding

Haruta et al. disclose in Figures 2 and 7-8 an ink tank (14) comprising said ink storage unit (900 or 7000) is heat-pressed before said ink storage unit (900 or 7000) is disposed inside said sealed space (column 20, lines 28-42).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate the teaching of Haruta et al. in the Cho et al. ink cartridge for the purpose of providing an ink absorbent member that attains satisfactory performance at low cost (see column 2, lines 28-32 of Haruta et al. reference).

It is noted that Cho et al. in view of Haruta et al. disclose the basic features of the claimed invention except for “a first adhesive material between said ink storage unit and said sheet for adhering said ink storage unit onto said sheet, and a second adhesive material between said sheet and the inner wall of the bottom of said housing for adhering said sheet onto the inner wall of the bottom of said housing and/or said ink storage unit is welded to said sheet and said sheet is welded to the inner wall of the bottom of said

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housing and/or said ink storage unit is welded to said sheet by heat sealing or ultrasound welding, and said sheet is welded to the inner wall of the bottom of said housing by heat sealing or ultrasound welding” is seen as a design expedient for an engineer depending upon a particular environment and the applications in which the ink storage unit, the sheet and the inner wall of the bottom of the ink cartridge are to be used in the ink jet printer for the purpose of preventing air bubbles that accumulate at the inner wall of the bottom of the ink cartridge in result blocking an ink supply from the ink cartridge to the ink pipe. Lacking of showing any criticality, applying adhesive layer and/or heat sealing and/or ultrasound welding between the ink storage unit, the sheet and the inner wall of the bottom of the ink cartridge would be obvious to a person having ordinary skill in the art at the time of the invention.

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art reference (US Pat. 5,216,450; US Pat. 6,325,499; US Pat. 6,595,711; US Pat. 6,761,441) cited in the PTO 892 form show an ink cartridge that is deemed to be relevant to the present invention. This reference should be reviewed.

Allowable Subject Matter

Claims 35-36 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. These claims would be allowable because none of the prior art references of record discloses an ink cartridge comprising an ink storage unit that has a cave adjacent to an ink pipe in the combination as claimed.


CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (571) 272-

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2262. The examiner can normally be reached on Tuesday to Friday from 9:00 A.M.to 7:0 P.M..

The fax number of this Group 2861 is (571) 273-8300.



ANHTN.VO
PRIMARY EXAMINER
March 9, 2006